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MEMORANDUM

Job No.: 70B-22-0110 **Doc. No:** 71326-0

Attention: Gary Peacock **Author:** Stephen Thomas

Company: Outline Planning Consultants Pty Itd Reviewed by: Samir Singh

Email: gpeacock@outline.com.au Issued by: Stephen Thomas

Subject: Response to EPA Comments

Dear Gary,

Please find Vipac Engineers & Scientists' (Vipac) response to the EPA Request for Additional Information – Integrated Development including a review of the Faheys Pit Impact Assessment – Air Quality, prepared by Vipac on behalf of Outline Planning Consultants Pty. Limited, dated 4 May 2023 (the Report) which provided the comments outlined below and are addressed in the attached Updated Report (Vipac Ref. 70B-22-0110-TRP-39884-1).

1. Additional exceedances are predicted at various receptors

Predicted exceedances at Receptor SR1

Modelling results in the AQIA predict exceedances of the 24-hr and annual PM10 impact assessment criteria at receptor SR1.

The AQIA states "It is understood that an agreement exists between the Proponent and the residence [SR1] such that impact assessment is not required for this location". However, no evidence is provided to support this statement.

Further, based on information provided in the EIS1, it appears that the agreement between the proponent and the owner of the sawmill (receptor SR1) refers to the anticipated noise, vibration and blasting operations only.

The EPA requests the proponent provides supporting evidence regarding any existing agreements with any of the receptors. Including:

- a) Evidence to demonstrate that the receptor(s) has been provided with detailed information to have a good understanding of the predicted impacts due to the total emissions from the proposal.
- b) Any provisions to show the receptor(s) has accepted dust pollution impacts above the impact assessment criteria and or the maximum impact the receptor may be subject to.
- c) Nominating the period that applies to the agreement.

Predicted exceedances at Receptors SR2, SR3, SR4, SR5

Cumulative impacts at these receptors are predicted to exceed the 24-hr PM10 impact assessment criteria. Although it is indicated that a contemporaneous assessment was undertaken and no additional exceedances are predicted, results in accordance with Section 11.2.3.b in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (The Approved Methods) have not been provided. Therefore, results and conclusions cannot be verified.

The EPA requests the AQIA be revised to include a contemporaneous assessment at all receptors and as per section 11.2.3.b in the Approved Methods to transparently demonstrate that the project will not result in additional exceedances.

2. Cumulative impacts do not account for emissions from the operations at the neighbouring quarry (Ellis' quarry). It is likely that the inclusion of these emissions in the assessment will result in higher predicted cumulative impacts and exceedances.



The EPA requests the AQIA be updated to account for cumulative impacts that include emissions from the Ellis' quarry.

3. It is unclear if the estimated emissions rates were modelled for every hour of the modelling period (365 days) or just during 6 days a week (313 days).

The EPA requests the AQIA be revised to clearly specify the number of hours and days the estimated rates were modelled.

4. The estimated emissions cannot be replicated. Whilst some of the information used to estimate the emissions inventory is provided, there is still uncertainty regarding some of the underlying assumptions made in its preparation.

The EPA requests the AQIA be updated to include a clear and transparent emissions inventory. This includes the provision of:

- a. A table showing the estimated annual emissions (kg/year) for each individual activity and for all relevant pollutants.
- b. A consolidated table that clearly outlines all the relevant information (e.g., material quantities, intensities, variables) that has been used for the emission estimation for each individual activity. This must be provided in a form that allows for the estimated emissions to be replicated.

Vipac Response

Vipac responds to the issues raised by the EPA as follows:

1. Additional exceedances are predicted at various receptors

Predicted exceedances at Receptor SR1

Supporting evidence that the agreement between the Proponent and the residence [SR1] has been provided as Appendix C of the updated Report.

Predicted exceedances at Receptors SR2, SR3, SR4, SR5

The updated Report has been amended to include timeseries plots of the model predictions for 24 hour PM10 and PM2.5 showing the contemporaneous impact and background to allow verification of the results reported in Tables 7.3 and 7.5 (please see Appendix D of the updated Report).

2. Cumulative impacts do not account for emissions from the operations at the neighbouring quarry (Ellis' quarry)

As outlined in the EIS, Ellis Quarry, which has operated since 1953, is small, with a limited area, resource and limited production capacity. The approval granted (Nymboida Council DA41/95) is for a pit of up to 3ha, with a resource of up to 15,000 cubic metres and a maximum depth of 5 metres. Ellis Quarry has achieved permitted depth and limits of extraction and resource recovery and future contributions to background dust levels under these conditions would therefore be expected to be minimal.

Sections 2 and 5.2 of the updated Report have been amended to address EPA comment 2.

3. It is unclear if the estimated emissions rates were modelled for every hour of the modelling period (365 days) or just during 6 days a week (313 days).

Modelling was undertaken incorporating maximum hourly emission rates for operational hours limited to 7.00am to 6.00pm Monday to Friday (ie. 11 hours operation per day) and 7.00am to 1.00pm on Saturdays (ie. 6 hours operation) or 3172 hours annually.

In addition, modelling of other sources such as blasting was restricted to 9.00am to 3.00pm Monday to Friday and wind erosion for the entire 365 days of the year.

Section 6.2.4 of the updated Report has been amended for clarification.

4. The estimated emissions cannot be replicated.

Table 6.1 of the updated Report has been amended to summarise estimated emissions in kg/year. Furthermore, as requested, data provided in Appendix A has been consolidated in one table to allow the emissions estimates to be replicated.



Yours sincerely,

VIPAC ENGINEERS & SCIENTISTS LTD

Dr Stephen Thomas

S. S. Laws

Air Quality Principal